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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,851	12/13/2004	Martin Dotling	112740-1026	1309
29177 7590 04/23/2008 BELF., BOYD & LLOYD, LLP P.O. BOX 1135 CHICAGO, IL 60690				
EXAMINER				
MILLER, BRANDON J				
ART UNIT		PAPER NUMBER		
2617				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,851

Applicant(s)

DOTTING ET AL.

Examiner

BRANDON J. MILLER

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 9-13 and 15 is/are rejected.
7) ☒ Claim(s) 14 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Disposition of Claims

- I. Claims 9-15 remain pending in the application.

Allowable Subject Matter

II. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest wherein a position of the bits being punctured is shifted by a whole number k , wherein $0 < k \leq 5$.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

III. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recited "matching a rate of the data to the number of bits defined for the physical channel using a rate matching pattern", in lines 12-13. This step does not adequately describe the rate matching step because it is unclear what "rate of data" is

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being matched. For example, the claim describes, "data composed ...of load data and identification data" in line 5 and "coded load data and...coded identification data" in line 10. The step should clearly describe the data referred to in the step by using terms such as linked data. The limitation renders the claim indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites "using a rate matching pattern one of immediately before and immediately after the XOR linking operation" in lines 13-14. This limitation does not adequately describe when the rate matching pattern is used because it is unclear what is meant by one of immediately before and immediately after. More descriptive language should be used such as using a rate matching pattern either immediately before or immediately after the XOR linking operation. The limitation renders the claim indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites "the rate matching pattern defining which bits in a data stream are at least one of punctured and repeated" in lines 13-14. This limitation does not adequately describe what the rate matching pattern defines because it is unclear what is meant by at least one of punctured and repeated. More descriptive language should be used such as the rate matching pattern defining which bits in a data stream are punctured or repeated. The limitation renders the claim indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following art rejection is based on the best possible interpretation of the claim language in light of the rejection under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 102

IV. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 9-13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Dick et al. (US 6,973,579 B2).

Regarding claim 9 Dick teaches a method for transmitting data with a defined number of bits via a physical channel in a communication system, the physical channel being used by at least one first communication device and a one second communication device (see col. 1, lines 15-19 and col. 2, lines 28-36). Dick teaches providing that the data to be transmitted is composed of load data and identification data for identifying a communication device (see col. 2, lines 30-36). Dick teaches separately coding the load data and the identification data from each other using convolution coding, wherein a same number of bits is produced after the coding operation for the load data and the identification data (see col. 2, lines 30-38, eight zero bit reads on the same number of bits being produced for the load data and the identification data (see col. 2, lines 30-32 & 51)). Dick teaches linking the coded load data and the coded identification data with each other via an XOR linking operation (see col. 2, lines 46-55 & 63-65). Dick teaches matching a rate of the data to the number of bits defined for the physical channel using a

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rate matching pattern one of immediately before and immediately after the linking operation, the rate matching pattern defining which bits in a data stream are at least one of punctured and repeated, wherein the rate matching pattern for the load data and the identification data is identical (see col. 2, lines 55-60).

Regarding claim 10 Dick teaches wherein the coding operation supplies a bit sequence of bits 1 to n in a defined time window by which the rate is defined, and rate matching is performed via a rate matching pattern by which individual bits in the bit sequence are punctured (see col. 2, lines 30-38 & 55-60).

Regarding claim 11 Dick teaches wherein the physical channel is a High Speed Shared Control Channel (see col. 1, lines 10-15).

Regarding claim 12 Dick teaches wherein the identification data is an identification number of a communication device (see col. 1, lines 32-35 and col. 2, lines 29-31).

Regarding claim 13 Dick teaches wherein the rate matching occurs using a rate matching pattern by which bits at positions 1, 2, 4, 8, 42, 45, 47 and 48 are punctured in a bit sequence consisting of $n=48$ bits (see col. 2, lines 56-60).

Regarding claim 15 Dick teaches bit-by-bit linking (see paragraphs col. 2, lines 46-55).

Response to Arguments

V. Applicant's arguments filed 1/31/2008 have been fully considered but they are not persuasive.

Regarding claims 9-13 and 15 Dick teaches a device as claimed. Dick teaches the same number of bits being produced for the load data and the identification data (see col. 2, lines 30-32 & 51, 8 bit UE ID and eight zero bit reads on the same number of bits being produced for the load data and the identification data). Dick teaches the rate matching pattern for the load data and the identification data is data is identical (see col. 2, lines 55-60, rate matching pattern for the load data and the identification data is data is identical because the rate matching pattern is for code which consists of load data and the identification data). Therefore, Dick teaches a device as claimed.

VI. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

VII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON J. MILLER whose telephone number is (571)272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

April 18, 2008

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/Brandon J Miller/

Examiner, Art Unit 2617